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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,666	09/15/2003	John A. Taylor	J656-007 US	1882
21706	7590	06/03/2005		
NOTARO AND MICHALOS 100 DUTCH HILL ROAD SUITE 110 ORANGEBURG, NY 10962-2100			EXAMINER JACKSON, ANDRE K	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

(A)

<b>Office Action Summary</b>	<b>Application No.</b> 10/662,666	<b>Applicant(s)</b> TAYLOR, JOHN A.	
	<b>Examiner</b> André K. Jackson	<b>Art Unit</b> 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-15 is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 8 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.                                                |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, the claim calls for "the second diameter to be different from the diameter". Should this be a different from the diameter of the first diameter?

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yau in view of Hayes et al. and Price.

Regarding claim 1, Yau discloses in the patent entitled "Differential pressure capillary viscometer" a container holding the coating fluid and having an outlet; a capillary tube connected to the outlet (Figure 1; 36,42). Yau does not disclose where the capillary tube has a diameter of between 0.010 inches and 0.050 inches; a pressure means for pressurizing the container and the coating fluid held in the container and regulating the pressure to produce a predetermined shear rate in the fluid through the capillary tube; and a pressure gauge operably connected container for measuring the pressure inside the container. However, Hayes et al. disclose in the patent entitled "Apparatus for measuring the flow rate and/or viscous characteristics of fluids" a pressure means for pressurizing the container and the coating fluid held in the container and regulating the pressure to produce a predetermined shear rate in the fluid through the capillary tube; and a pressure gauge operably connected container for measuring the pressure inside the container (Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yau to include a pressure means for pressurizing the container and the coating fluid held in the container and regulating the pressure to produce a predetermined shear rate in the fluid through the capillary tube and a pressure gauge operably connected container for measuring the pressure inside the container. By adding this feature the apparatus would be able to control and measure the pressure

of the apparatus accurately. Yau does not disclose the diameter for the tubes. However, Price discloses in the patent entitled "Apparatus and method for capillary viscometry of fluids" the diameter between 0.010 inches and 0.050 for the tubes (Column 3, lines 60-63). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yau to include the diameter between 0.010 inches and 0.050 for the tubes. By adding this feature the apparatus would be able to allow liquid to flow due to its own pressure head.

Regarding claim 4, Yau does not disclose where the capillary tube is between 0.10 inches and 6 inches long. However, Price discloses where the capillary tube is between 0.10 inches and 6 inches long (Column 4, lines 15-63). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yau to include where the capillary tube is between 0.10 inches and 6 inches long. By adding this feature the apparatus would be able to measure the viscosity rapidly in low viscous fluid. There is no description of the length of the tube and Applicant has not disclosed any criticality towards the length of the tube. Therefore, to make the tube 6 inches long would be well within the purview of the skilled artisan since this would provide an accurate measurement within the system.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yau in view of Hayes et al., Price and in further view of Tietz.

Regarding claim 2, Yau does not disclose where the capillary tube is removable from the outlet. However, Tietz discloses in the patent entitled "Novel copolyesters and their use in compostable products such as disposable diapers" where the capillary tube is removable from the outlet (Column 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yau to include where capillary tube is removable from the outlet. By adding this feature the user would be able to remove the tube for cleaning or replacement.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yau in view of Hayes et al. and Price, Tietz and in further view of Abbott et al.

Regarding claim 3, Yau does not disclose where a second capillary tube having a second diameter between 0.010 inches and 0.050 inches, different from the diameter. However, Abbott et al. disclose in the patent entitled "Differential pressure capillary viscometer for measuring viscosity independent of flow rate and temperature fluctuations" where a second capillary tube having a second diameter between 0.010 inches and 0.050 inches, different from the diameter (Column 3, lines 15-63). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yau to include where a second capillary tube having a second diameter between 0.010 inches and 0.050 inches,

different from the diameter. By adding this feature the apparatus would be able to allow liquid to flow due to its own pressure head.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yau in view of Abbott et al.

Regarding claim 5, Yau discloses providing a testing device having a container, a pressure gauge connected to the container and a capillary tube at an outlet of container, the capillary tube having a smaller diameter than the outlet; placing a sample of the coating fluid into the container of the testing device; selecting a coating fluid shear rate corresponding a process shear rate of coating application process (Figure 1; 36,42). Yau does not disclose pressurizing the coating fluid sample to produce a predetermined flow rate through capillary tube corresponding to the selected coating fluid shear rate and reading the back pressure on the coating fluid sample from the pressure gauge. However, Abbott et al. disclose pressurizing the coating fluid sample to produce a predetermined flow rate through capillary tube corresponding to the selected coating fluid shear rate and reading the back pressure on the coating fluid sample from the pressure gauge (Abstract; 14,16; Column 7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yau to include pressurizing the coating fluid sample to produce a predetermined flow rate through capillary tube corresponding to the selected coating fluid shear rate and reading the back pressure on

the coating fluid sample from the pressure gauge. By adding this feature the apparatus would be able to obtain viscosity information on molecular weight distribution.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yau in view of Abbott et al. and in further view of Taylor.

Regarding claim 6, Yau does not disclose selecting the capillary tube from a plurality of capillary tubes each having different diameters. However, Taylor discloses in the patent entitled "Coating stretch tester" selecting the capillary tube from a plurality of capillary tubes each having different diameters (Column 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yau to include selecting the capillary tube from a plurality of capillary tubes each having different diameters. By adding this feature the user would be able to select the capillary that works best for the particular coating fluid.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yau in view of Abbott et al. and in further view of Fink-Jensen.

Regarding claim 7, Yau does not disclose where the coating fluid shear rate selected be one of 2,000/sec, 20,000/sec, 62,000/sec, 63,000/sec, 300,000/sec, and 500,000/sec. However, Fink-Jensen discloses in the patent entitled "Method of measuring the flow properties of high viscosity fluids as well as a device for carrying out the inventive



Art Unit: 2856

method" where the coating fluid shear rate selected be one of 2,000/sec, 20,000/sec, 62,000/sec, 63,000/sec, 300,000/sec, and 500,000/sec (Column 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yau to include where the coating fluid shear rate selected be one of 2,000/sec, 20,000/sec, 62,000/sec, 63,000/sec, 300,000/sec, and 500,000/sec. By adding this feature the apparatus would be able to measure within a short period of time.

10. Claims 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 10-15 are allowed.

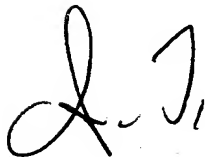
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone number is (571) 272-2196. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

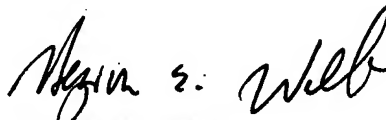
Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.J.



May 27, 2005



HEZRON WILLIAMS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800